

**HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND**  
**RETIREE HEALTH CARE PLAN**  
ACTUARIAL VALUATION REPORT  
AS OF JULY 1, 2013

August 18, 2014

Ms. Sandra Yahiro  
EUTF Administrator  
Hawaii Employer-Union Health Benefits Trust Fund  
201 Merchant St.; Suite 1520  
Honolulu, Hawaii 96813

Dear Ms. Yahiro:

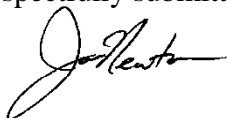
Submitted in this report are the results of an actuarial valuation for the Hawaii Employer-Union Health Benefits Trust Fund (EUTF) of the liabilities associated with the employer financed retiree health benefits provided through the EUTF. The date of the valuation was July 1, 2013. The annual required contribution has been calculated for the fiscal year beginning July 1, 2014.

The actuarial calculations were prepared to determine the annual required employer contributions to satisfy the requirements of ACT 268, SLH 2013 ("ACT 268") and to comply with the requirements of Statement 43 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the Trust's financial reporting requirements may produce significantly different results. This report may be provided to parties other than the EUTF only in its entirety and only with the permission of the EUTF.

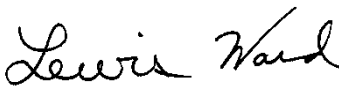
The valuation was based upon information, furnished by the EUTF and the Employees' Retirement System of the State of Hawaii (ERS), concerning retiree health benefits, members' census and financial data. Data was checked for internal consistency but was not otherwise audited. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The signing actuaries are independent of the plan sponsor. To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods. Joseph Newton and Mehdi Riazi are members of the American Academy of Actuaries and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,



Joseph P. Newton, FSA, FCA, EA  
Senior Consultant



Lewis Ward  
Consultant



Mehdi Riazi, ASA, EA  
Consultant

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## SECTION A

### OVERVIEW

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The following table summarizes the key results of the July 1, 2013 Other Post-Employment Benefits (OPEB) valuation for the EUTF.

Executive Summary		
	July 1, 2013	July 1, 2011**
<b>Membership</b>		
Number of		
-Retirees	43,345	41,754
-Deferred Inactives	6,632	6,021
-Active Employees	66,108	64,814
Covered Payroll*	\$ 3,881,223,000	\$ 3,743,000,000
<b>Actuarial Summary</b>		
Discount Rate	7.0%	7.0%
Payroll Growth Rate	3.5%	3.5%
Present Value of Benefits	\$ 13,838,987,000	\$ 13,563,774,000
Actuarial Accrued Liability	\$ 11,477,633,000	\$ 11,362,429,000
Market Value of Assets	\$ 296,124,000	\$ 178,192,000
Unfunded Actuarial Accrued Liability	\$ 11,181,509,000	\$ 11,184,237,000
Funded Ratio	2.6%	1.6%
ARC as % of Payroll	23.7%	23.9%
Fiscal Year Ending	June 30, 2015	June 30, 2013
<b>ACT 268 Minimum Contribution Summary</b>		
Fiscal Year Ending	June 30, 2015	
Annual Required Contribution (ARC)	\$ 952,205,000	
Projected pay-as-you-go benefits	\$ (412,469,000)	
OPEB Trust Contribution to Fully Fund ARC	\$ 539,736,000	
ACT 268 Phase-In	20%	
<b>Minimum OPEB Trust Contribution</b>	<b>\$ 107,947,000</b>	
Fiscal Year Ending	June 30, 2016	
Annual Required Contribution (ARC)	\$ 985,529,000	
Projected pay-as-you-go benefits	\$ (454,252,000)	
OPEB Trust Contribution to Fully Fund ARC	\$ 531,277,000	
ACT 268 Phase-In	40%	
<b>Minimum OPEB Trust Contribution</b>	<b>\$ 212,510,000</b>	

\*The Covered Payroll for the June 30, 2013 valuation is equal to the projected payroll for FYE June 30, 2014.

\*\*For easier comparison, the results of the July 1, 2011 valuation are shown using a 7.0% discount rate.

This report provides information for the EUTF to comply with accounting standards issued by the Government Accounting Standards Board (GASB), Statement No. 43, relating to Other Post-Employment Benefits (OPEB). These benefits primarily include medical, prescription drug, dental, vision, and life insurance benefits provided to eligible retirees. Any other OPEB benefits offered to the employees of the participating employers are outside the scope of this report.

This report also summarizes the minimum OPEB trust contributions required to satisfy the funding requirements of ACT 268 by the participating employers. The Annual Required Contributions (ARC) developed in this report are for the fiscal years ending June 30, 2015 and June 30, 2016. Subsequently, each biennial valuation will be applicable for the two fiscal years which begin one year after the valuation date. The one year lag between the valuation date and the applicable fiscal years will allow appropriate time for budgeting and management of the appropriations.

Section C provides a 30-year projection of liability and contribution information useful to management for the operation of the OPEB program.

#### **Agent Multiple-Employer Plans under GASB 43 & 45**

Under GASB 43, an **Agent multiple-employer plan** is defined as, “An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer’s contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer’s plan to determine the employer’s periodic contribution rate and other information for the individual plan, based on the benefit formula selected by the employer and the individual plan’s proportionate share of the pooled assets. The results of the individual valuations are aggregated at the administrative level.”

In a cost-sharing arrangement, such as the Employees’ Retirement System of the State of Hawaii (ERS), the plan’s assets can be used to pay the benefits for the retirees of any participating employer. By contrast, the assets of the participating government employers in an *agent multiple-employer plan* are pooled for investment purposes but separate accounts are maintained for each individual employer. As such, each employer’s assets at EUTF can only be used to pay benefits for that employer’s retirees. Each employer’s unfunded actuarial accrued liability and annual required contribution for retiree medical benefits will be determined based solely on that employer’s membership and assets.

**ACT 268**

Pursuant to ACT 268, the EUTF created a separate trust fund (The OPEB Trust), as of June 30, 2013, specifically for pre-funding the participating employers OPEB benefits. Previous pre-funding contributions and related net investment earnings were transferred to each employer's respective OPEB Trust account. As required by ACT 268, contributions to the OPEB Trust shall be irrevocable and the assets of the fund shall be dedicated exclusively to providing health and other benefits to retirees and their eligible dependents. The assets in the OPEB Trust shall not be subject to appropriation for any other purpose and shall not be subject to claims by creditors of the employers or the board or plan administrator.

ACT 268 establishes an "annual required contribution" (ARC) equal to (a) the normal cost, plus (b) an amortization payment to fund the actuarial accrued liability over a period of thirty years. Moreover, employers are required to contribute 100% of the ARC starting in fiscal year ending June 30, 2019. ACT 268 establishes mechanisms for funding the ARC if the employer fails to do so. Full funding of the ARC is phased-in according to the following schedule:

Fiscal Year	ARC Phase-in
2014-2015	20%
2015-2016	40%
2016-2017	60%
2017-2018	80%
2018-2019	100%

For financial reporting purposes, the discount rate used in the valuation should equal the estimated long-term investment yield on the investments that are expected to be used to finance the payment of benefits. Based on the provisions of GASB statements 43 and 45, the investments expected to be used to finance the payment of benefits are "the plan assets for plans for which the funding policy is to contribute consistently an amount at least equal to the ARC". ACT 268 has established a funding policy which ensures the ARC will be consistently met. As a result, the liabilities in this valuation have been calculated using a 7.0% assumed long-term investment return on the OPEB Trust's assets. The 7.0% return assumption is based on the OPEB Trust's investment policy and we believe the assumption is consistent with the target asset allocation.

Because pay-as-you-go costs are considered contributions towards the ARC, it is not clear in ACT 268 whether an employer whose pay-as-you-go costs are greater than 20% of the ARC would be required to contribute any additional amounts in fiscal year ending June 30, 2015. Based on conversations with the State, we believe the intent of the law was to require some additional level of pre-funding, in excess of the pay-as-you-go benefits, starting in fiscal year ending June 30, 2015. Therefore, it is our understanding that the phase-in applies to the ARC payment which is in excess of the estimated pay-as-you-go benefits. The table at the beginning of the Executive Summary provides the combined minimum OPEB Trust contributions, in addition to the pay-as-you-go

benefits, which would satisfy the requirements of ACT 268 in fiscal year ending June 30, 2015 and fiscal year ending June 30, 2016.

### **Actuarial Assumptions and Methods**

In any long-term Actuarial Valuation (such as for Pensions and OPEB), certain demographic, economic and behavioral assumptions are made concerning the population, the investment discount rates and the benefits provided. These Actuarial Assumptions form the basis for the actuarial model which is used to project the future population, the future benefits provided, and the future contributions collected. Then the investment discount rate assumption is used to discount those projected net OPEB benefits to a present value. This and other related present values are used to calculate the Annual Required Contribution.

This Actuarial Valuation is similar to the Actuarial Valuations performed for the State's pension plans. In fact, the demographic assumptions used in this OPEB Valuation were identical to those used in the June 30, 2013 ERS valuation. Because the assumptions were based upon the most recent actuarial experience study adopted by the Trustees of ERS, they were deemed reasonable for this OPEB Valuation and were employed in this report.

There are some economic and behavioral assumptions which are unique to medical benefits. It would be instructive to review the Section of this Report titled, "Actuarial Assumptions and Methods" for a detailed discussion and disclosure of all the relevant Actuarial Assumptions used in this Valuation.

GASB Statement No. 43 provides an acceptable range of flexibility to governmental employers (and their actuaries) in the use of various actuarial cost methods. The Entry Age Normal Cost Method was used in this valuation. This is both an acceptable and reasonable cost method. Furthermore, the Normal Costs and the amortization of any Unfunded Actuarial Accrued Liabilities were calculated using a level percent of pay.

### **Summary of Changes**

When compared using a 7.0% discount rate, the Unfunded Actuarial Accrued Liability (UAAL) decreased by \$2.7 million dollars from July 1, 2011 to July 1, 2013. The plan's favorable claims experience and the EGWP Wrap Plan design implemented on April 1, 2013 for Medicare retirees were the most significant factors affecting the change in the UAAL. The UAAL was much less than expected based on projections from the prior report. All assumption and method changes since the prior report are discussed in Section G.



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## **SECTION B**

### VALUATION RESULTS

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## Results by Employer

(\$ Thousands)	State of Hawaii	City & County of Honolulu	HART*	County of Hawaii	County of Maui	County of Kauai	Kauai - Department of Water	Board of Water Supply - Honolulu	Hawaii Department of Water Supply	Total
Discount Rate	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Payroll Growth Rate	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Present Value of Benefits	\$ 10,295,875	\$ 2,134,762	\$ 5,480	\$ 500,961	\$ 480,071	\$ 235,687	\$ 15,194	\$ 140,238	\$ 30,719	\$ 13,838,987
Actuarial Accrued Liability	\$ 8,529,546	\$ 1,795,635	\$ 3,413	\$ 410,182	\$ 386,100	\$ 192,098	\$ 12,607	\$ 122,886	\$ 25,166	\$ 11,477,633
Market Value of Assets	\$ 0	\$ 123,406	\$ 9	\$ 66,077	\$ 26,838	\$ 42,821	\$ 3,864	\$ 25,638	\$ 7,471	\$ 296,124
Unfunded Actuarial Accrued Liability	\$ 8,529,546	\$ 1,672,229	\$ 3,404	\$ 344,105	\$ 359,262	\$ 149,277	\$ 8,743	\$ 97,248	\$ 17,695	\$ 11,181,509
Funded Ratio	0.0%	6.9%	0.3%	16.1%	7.0%	22.3%	30.6%	20.9%	29.7%	2.6%
ARC as % of Payroll for FYE 2015	23.7%	25.8%	7.6%	22.8%	19.0%	20.3%	18.9%	26.0%	21.5%	23.7%
<b>Fiscal Year Ending June 30, 2015</b>										
Annual Required Contribution (ARC)	\$ 717,689	\$ 147,058	\$ 532	\$ 32,478	\$ 28,241	\$ 14,945	\$ 884	\$ 8,528	\$ 1,850	\$ 952,205
Projected pay-as-you-go benefits	\$ (302,738)	\$ (68,518)	\$ (47)	\$ (14,820)	\$ (12,936)	\$ (6,817)	\$ (447)	\$ (5,278)	\$ (868)	\$ (412,469)
OPEB Trust Contribution to Fully Fund ARC	\$ 414,951	\$ 78,540	\$ 485	\$ 17,658	\$ 15,305	\$ 8,128	\$ 437	\$ 3,250	\$ 982	\$ 539,736
ACT 268 Phase-In	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
<b>Minimum OPEB Trust Contribution</b>	<b>\$ 82,990</b>	<b>\$ 15,708</b>	<b>\$ 97</b>	<b>\$ 3,532</b>	<b>\$ 3,061</b>	<b>\$ 1,626</b>	<b>\$ 87</b>	<b>\$ 650</b>	<b>\$ 196</b>	<b>\$ 107,947</b>
<b>Fiscal Year Ending June 30, 2016</b>										
Annual Required Contribution (ARC)	\$ 742,808	\$ 152,205	\$ 551	\$ 33,614	\$ 29,229	\$ 15,468	\$ 914	\$ 8,826	\$ 1,914	\$ 985,529
Projected pay-as-you-go benefits	\$ (333,770)	\$ (75,092)	\$ (64)	\$ (16,288)	\$ (14,299)	\$ (7,578)	\$ (483)	\$ (5,711)	\$ (967)	\$ (454,252)
OPEB Trust Contribution to Fully Fund ARC	\$ 409,038	\$ 77,113	\$ 487	\$ 17,326	\$ 14,930	\$ 7,890	\$ 431	\$ 3,115	\$ 947	\$ 531,277
ACT 268 Phase-In	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
<b>Minimum OPEB Trust Contribution</b>	<b>\$ 163,615</b>	<b>\$ 30,845</b>	<b>\$ 195</b>	<b>\$ 6,930</b>	<b>\$ 5,972</b>	<b>\$ 3,156</b>	<b>\$ 172</b>	<b>\$ 1,246</b>	<b>\$ 379</b>	<b>\$ 212,510</b>

\*Honolulu Authority of Rapid Transportation

## Liabilities and Assets

The liabilities shown in the following exhibit were calculated as of July 1, 2013.

	Medical/ Prescription Drug/ Dental/Vision/Life	Medicare Part B*	Total
Present Value of Benefits (PVB)			
Retirees	\$ 4,693,821,000	\$ 984,363,000	\$ 5,678,184,000
Deferred Inactives	681,426,000	164,168,000	845,594,000
Actives	5,973,688,000	1,341,521,000	7,315,209,000
<b>Total PVB</b>	<b>\$ 11,348,935,000</b>	<b>\$ 2,490,052,000</b>	<b>\$ 13,838,987,000</b>
Actuarial Accrued Liability (AAL)			
Retirees	\$ 4,693,821,000	\$ 984,363,000	\$ 5,678,184,000
Deferred Inactives	681,426,000	164,168,000	845,594,000
Actives	4,110,807,000	843,048,000	4,953,855,000
<b>Total AAL</b>	<b>\$ 9,486,054,000</b>	<b>\$ 1,991,579,000</b>	<b>\$ 11,477,633,000</b>
Normal Cost	\$ 229,015,000	\$ 63,130,000	\$ 292,145,000

\* The State reimburses retirees for their Medicare Part B premiums.

The EUTF's assets in the OPEB Trust as of July 1, 2013 were \$296 million.

## Projected Benefits

The table below provides the EUTF's estimated benefit payments ("pay-as-you-go") for the 15 years following the valuation date.

Projected Benefit Payments			
Year Ending June 30,	Medical/ Prescription Drug/ Dental/Vision/Lif	Medicare Part B*	Total
2014	\$ 322,538,000	\$ 61,998,000	\$ 384,537,000
2015	344,099,000	68,367,000	412,469,000
2016	379,292,000	74,960,000	454,252,000
2017	417,430,000	82,008,000	499,438,000
2018	458,581,000	89,604,000	548,186,000
2019	502,104,000	97,666,000	599,770,000
2020	548,297,000	105,943,000	654,240,000
2021	596,131,000	114,610,000	710,742,000
2022	645,768,000	123,479,000	769,248,000
2023	691,399,000	132,657,000	824,056,000
2024	731,763,000	142,195,000	873,958,000
2025	772,457,000	152,011,000	924,468,000
2026	813,230,000	162,096,000	975,326,000
2027	854,173,000	172,509,000	1,026,680,000
2028	895,387,000	183,122,000	1,078,508,000

\* The State reimburses retirees for their Medicare Part B premiums.

The projected benefit payments do not include any benefits paid to retirees who are hired after July 1, 2013.

## Annual Required Contribution (ARC)

Entry Age Normal Cost Actuarial Method

	FYE 6/30/2015	FYE 6/30/2016
Discount Rate Used	7.0%	7.0%
Normal Cost	\$ 302,370,000	\$ 312,951,000
Amortization of UAAL	<u>\$ 649,835,000</u>	<u>\$ 672,578,000</u>
Total ARC	\$ 952,205,000	\$ 985,529,000
% Payroll	23.7%	23.7%

The Annual Required Contribution is equal to the Normal Cost, the present value of benefits earned by the current employees in the respective fiscal year, plus an amortization payment to fund the liability attributable to past service. Consistent with the payroll growth assumption, the ARC for fiscal year ending June 30, 2016 is 3.5% higher than the ARC for fiscal year ending June 30, 2015.

The table above provides the combined ARC for all participating employers. It is important to keep in mind that each participating employer is responsible for the amount that they contribute towards their own ARC.

## GASB Accounting Schedules

### Schedule of Funding Progress

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b) - (a)	Funded Ratio (a)/(b)	Covered Payroll (c)	Unfunded AAL as a % of Covered Payroll (b - a)/(c)
July 1, 2007	\$ 0	\$ 9,194,300,000	\$ 9,194,300,000	0.0%	\$ 2,789,000,000	329.7%
July 1, 2009	\$ 115,500,000	\$14,662,100,000	\$ 14,546,600,000	0.8%	\$ 2,758,000,000	527.4%
July 1, 2011	\$ 178,200,000	\$16,458,800,000	\$ 16,280,600,000	1.1%	\$ 3,743,000,000	435.0%
July 1, 2013	\$ 296,124,000	\$11,477,633,000	\$ 11,181,509,000	2.6%	\$ 3,881,223,000	288.1%

Prior to July 1, 2013, the Actuarial Accrued Liability (AAL) was calculated using a 4.00% discount rate for the State of Hawaii, the largest participating employer, and using a 7.00% discount rate for the other participating employers. The AAL for all employers as of July 1, 2013 is based on a 7.00% discount rate.

### Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Contribution (ARC)	Percentage of ARC Contributed
6/30/2011	\$ 1,300,757,000	27.6%
6/30/2012	\$ 1,207,638,000	30.8%
6/30/2013	\$ 1,219,917,000	31.2%

## Actuarial Methods and Assumptions

### Actuarial Methods and Assumptions

Inflation rate	3.00%
Investment rate of return	7.00%
Actuarial Cost method	Entry Age Normal
Amortization method*	Level percent, closed
Equivalent Single Amortization Period	28.2
Payroll Growth	3.50%
Asset Method	Market
Healthcare cost trend rate	
PPO**	Initial rate of 9.00%, declining to a rate of 5.00% after 10 years
HMO**	Initial rate of 7.50%, declining to a rate of 5.00% after 10 years
Part B	5.00%
Dental	4.00%
Vision	3.00%
Life Insurance	0.00%

\* Closed bases are established at each valuation for new unfunded liabilities.

\*\* Includes prescription drug assumptions.

## Trend Sensitivity

Actuarial valuations are based on the cost of benefits to be paid in the future. The payments considered will range from one month in the future to decades from the valuation date. When the benefits being valued are health benefits, a key factor is the future cost of the medical benefits being promised. The future benefits are projected using the current cost of the health care benefits and assumed future health care cost increases. The final cost of providing retiree health care benefits will depend upon how the charges for health care services actually increase in the future.

In order to demonstrate how the cost of these benefits can vary depending upon future health care cost increases, we have performed additional valuations based upon alternative health care cost increase assumptions. The following table shows the impact of a 1.0% increase or decrease in the assumed healthcare trend rates.

	-1% Trend	Baseline	+1% Trend
Present Value of Benefits (PVB)	\$ 11,766,976,000	\$ 13,838,987,000	\$ 16,498,485,000
Funded Status			
Actuarial Accrued Liability	\$ 9,936,905,000	\$ 11,477,633,000	\$ 13,406,832,000
Assets	296,124,000	296,124,000	296,124,000
Unfunded AAL	9,640,781,000	11,181,509,000	13,110,708,000
ARC for FYE15	\$ 802,288,000	\$ 952,205,000	\$ 1,145,464,000



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**SECTION C**  
PROJECTIONS

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## Summary of Funding Projections

The projection in this section provides estimated future liabilities, assets, contributions and benefit payments based on census data as of July 1, 2013 and the actuarial assumptions/methods described in Section G of this report. The projections provide insight into how the employers' contributions and the financial condition of the plan are assumed to change over time. Key items from the projections are:

- Prefunding the OPEB liability will require a significant commitment. However, the long-term savings will also be significant. Once the plan is well funded, the percentage of the benefits paid for by investment earnings is typically over 50%.
- The Annual Required Contribution (ARC) is developed using a level percentage of payroll amortization. Said another way, the ARC is assumed to grow at the same rate as payroll, 3.50%.
- The ARC is expected to remain level, as a percentage of payroll, until the initial amortization bases are paid off.
- The projection assumes the employers will phase into the full ARC by paying the minimum amount required by ACT 268.
- For this purpose, the prefunding period is defined as the number of years before the combined benefit payments exceed the combined employer contributions.
- The additional cost of prefunding and the projected assets at the end of the prefunding period are shown at the top of the projection.
- Upcoming changes to the accounting rules may require balance sheet recognition of the entire Unfunded Actuarial Accrued Liability (UAAL).
- The projections include liabilities for future employees. However, the total number of active employees is assumed to remain level.
- The projection provides estimated future results for the combined status of the plan. It is important to keep in mind that each participating employer is responsible for the amount that they contribute towards their own ARC.

Please bear in mind that, depending on plan experience, actual results could deviate significantly from the actuarial projections. The key assumptions in the projections are:

1. the assumed 7.00% rate of investment return
2. future medical inflation
3. that the benefits and cost sharing provisions will remain the same as they currently are

**State of Hawaii EUTF Retiree Health Care Plan**  
**Actuarial Valuation – July 1, 2013**

**Section C**

**Minimum Contribution Required by ACT 268**

Over the next 31 years, the additional cost of prefunding is \$12.9 billion.

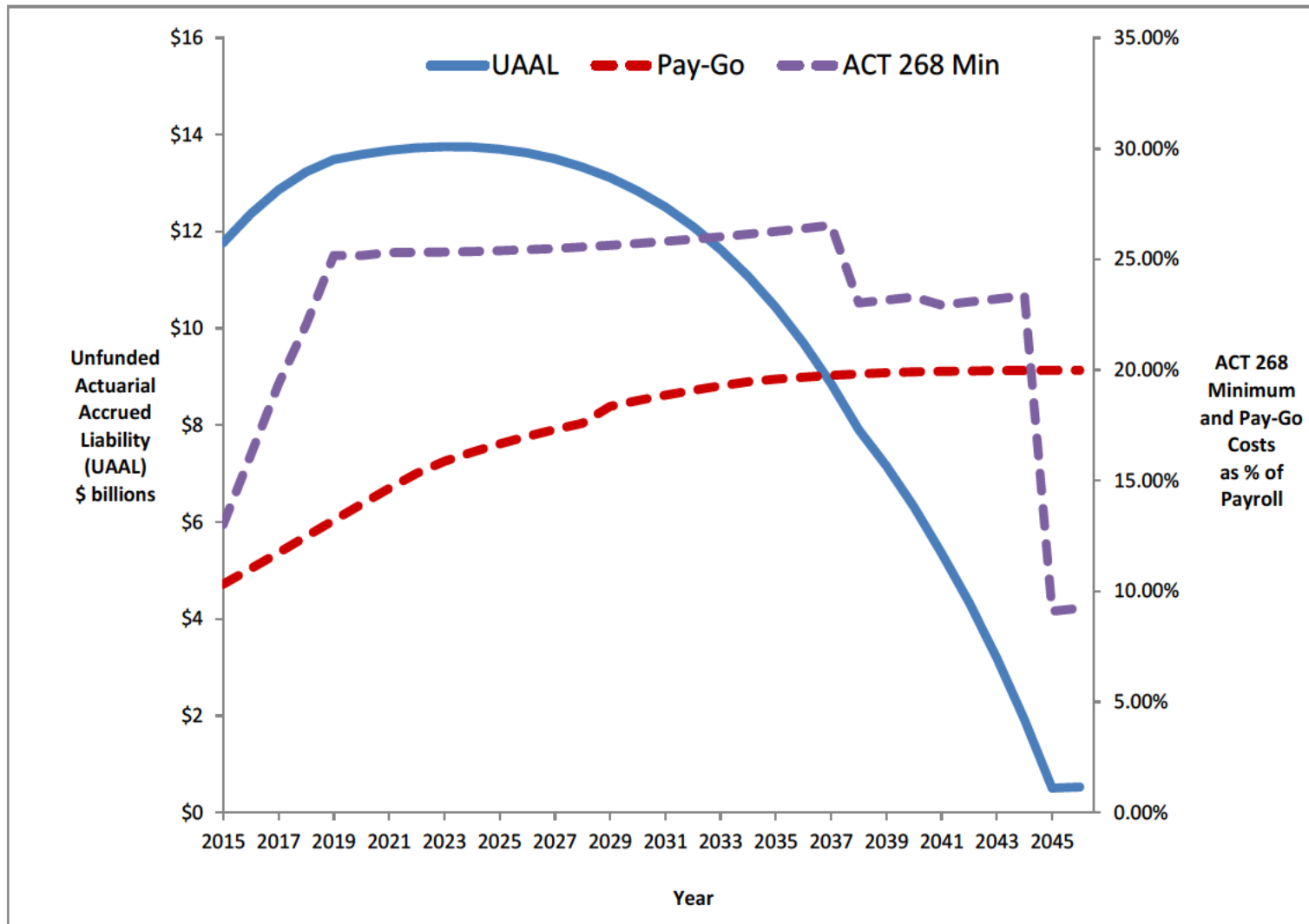
However, at the end of the prefunding period, the projected assets are \$43.8 billion.

Fiscal Year Ending	Payroll	Actuarial Accrued Liability (AAL)	Beginning of Year Assets	Unfunded AAL (UAAL)	Funded Ratio	Annual Required Contribution	Actual Contribution	Contribution as % of Payroll	Benefit Payment Total	Benefits as % of Payroll	Additional Cost of Prefunding
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
2014	\$ 3,881,223,000	\$ 11,477,633,000	\$ 296,124,000	\$ 11,181,509,000	2.6%	\$ 925,814,000	\$ 481,737,000	12.4%	\$ 384,537,000	9.9%	\$ 97,200,000
2015	3,996,787,000	12,187,041,000	414,052,000	11,772,989,000	3.4%	952,205,000	520,416,000	13.0%	412,469,000	10.3%	107,947,000
2016	4,123,137,000	12,922,295,000	554,760,000	12,367,535,000	4.3%	985,529,000	666,762,000	16.2%	454,252,000	11.0%	212,510,000
2017	4,256,271,000	13,673,316,000	813,541,000	12,859,775,000	5.9%	1,040,458,000	824,049,000	19.4%	499,438,000	11.7%	324,611,000
2018	4,396,561,000	14,438,601,000	1,206,461,000	13,232,140,000	8.4%	1,074,636,000	969,345,000	22.0%	548,186,000	12.5%	421,159,000
2019	4,542,595,000	15,216,077,000	1,726,814,000	13,489,263,000	11.3%	1,143,052,000	1,143,052,000	25.2%	599,770,000	13.2%	543,282,000
2020	4,695,955,000	16,004,459,000	2,409,988,000	13,594,471,000	15.1%	1,181,650,000	1,181,650,000	25.2%	654,240,000	13.9%	527,410,000
2021	4,855,793,000	16,802,236,000	3,124,555,000	13,677,681,000	18.6%	1,228,691,000	1,228,691,000	25.3%	710,742,000	14.6%	517,949,000
2022	5,021,783,000	17,608,827,000	3,879,352,000	13,729,475,000	22.0%	1,271,091,000	1,271,091,000	25.3%	769,248,000	15.3%	501,843,000
2023	5,193,927,000	18,423,526,000	4,670,315,000	13,753,211,000	25.3%	1,315,330,000	1,315,330,000	25.3%	824,056,000	15.9%	491,274,000
2024	5,370,780,000	19,251,514,000	5,505,705,000	13,745,809,000	28.6%	1,361,497,000	1,361,497,000	25.4%	873,958,000	16.3%	487,539,000
2025	5,553,058,000	20,099,644,000	6,395,707,000	13,703,937,000	31.8%	1,409,638,000	1,409,638,000	25.4%	924,468,000	16.6%	485,170,000
2026	5,740,742,000	20,969,569,000	7,345,556,000	13,624,013,000	35.0%	1,459,947,000	1,459,947,000	25.4%	975,326,000	17.0%	484,621,000
2027	5,934,186,000	21,863,439,000	8,361,327,000	13,502,112,000	38.2%	1,512,462,000	1,512,462,000	25.5%	1,026,680,000	17.3%	485,782,000
2028	6,133,458,000	22,783,427,000	9,449,405,000	13,334,022,000	41.5%	1,567,360,000	1,567,360,000	25.6%	1,078,508,000	17.6%	488,852,000
2029	6,338,941,000	23,732,044,000	10,616,826,000	13,115,218,000	44.7%	1,624,865,000	1,624,865,000	25.6%	1,163,088,000	18.3%	461,777,000
2030	6,551,484,000	24,678,724,000	11,837,943,000	12,840,781,000	48.0%	1,684,902,000	1,684,902,000	25.7%	1,219,822,000	18.6%	465,080,000
2031	6,770,474,000	25,653,359,000	13,147,958,000	12,505,401,000	51.3%	1,747,550,000	1,747,550,000	25.8%	1,276,623,000	18.9%	470,927,000
2032	6,996,600,000	26,659,051,000	14,555,727,000	12,103,324,000	54.6%	1,812,925,000	1,812,925,000	25.9%	1,334,803,000	19.1%	478,122,000
2033	7,229,803,000	27,697,876,000	16,069,485,000	11,628,391,000	58.0%	1,881,097,000	1,881,097,000	26.0%	1,394,155,000	19.3%	486,942,000
2034	7,468,941,000	28,772,242,000	17,698,335,000	11,073,907,000	61.5%	1,952,142,000	1,952,142,000	26.1%	1,453,288,000	19.5%	498,854,000
2035	7,715,315,000	29,886,227,000	19,453,530,000	10,432,697,000	65.1%	2,026,294,000	2,026,294,000	26.3%	1,511,145,000	19.6%	515,149,000
2036	7,969,888,000	31,045,455,000	21,348,457,000	9,696,998,000	68.8%	2,103,604,000	2,103,604,000	26.4%	1,567,869,000	19.7%	535,735,000
2037	8,232,714,000	32,255,775,000	23,397,334,000	8,858,441,000	72.5%	2,184,313,000	2,184,313,000	26.5%	1,625,897,000	19.7%	558,416,000
2038	8,504,657,000	33,521,093,000	25,613,108,000	7,907,985,000	76.4%	1,957,648,000	1,957,648,000	23.0%	1,685,503,000	19.8%	272,145,000
2039	8,786,975,000	34,845,338,000	27,687,696,000	7,157,642,000	79.5%	2,034,402,000	2,034,402,000	23.2%	1,745,869,000	19.9%	288,533,000
2040	9,079,112,000	36,233,563,000	29,924,466,000	6,309,097,000	82.6%	2,114,481,000	2,114,481,000	23.3%	1,807,281,000	19.9%	307,200,000
2041	9,381,664,000	37,690,988,000	32,337,132,000	5,353,856,000	85.8%	2,150,894,000	2,150,894,000	22.9%	1,870,175,000	19.9%	280,719,000
2042	9,694,981,000	39,222,828,000	34,891,276,000	4,331,552,000	89.0%	2,236,279,000	2,236,279,000	23.1%	1,934,404,000	20.0%	301,875,000
2043	10,019,537,000	40,834,820,000	37,646,105,000	3,188,715,000	92.2%	2,325,397,000	2,325,397,000	23.2%	2,000,424,000	20.0%	324,973,000
2044	10,355,642,000	42,532,814,000	40,617,679,000	1,915,135,000	95.5%	2,418,513,000	2,418,513,000	23.4%	2,068,364,000	20.0%	350,149,000
2045	10,704,417,000	44,323,061,000	43,823,322,000	499,739,000	98.9%	973,545,000	973,545,000	9.1%	2,138,511,000	20.0%	(1,164,966,000)
2046	11,065,984,000	46,211,970,000	45,685,214,000	526,756,000	98.9%	1,020,497,000	1,020,497,000	9.2%	2,211,481,000	20.0%	(1,190,984,000)

The projection includes liabilities for future employees.

The 2014 entry in Column (l) was not required by ACT 268. However, the County of Maui's FYE14 prefunding contributions impacted the County's FYE15 ARC and ACT 268 minimum.

**Minimum Contribution Required by ACT 268**  
**Trust contribution is less than benefits paid starting in fiscal year ending June 30, 2045**



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## **SECTION D**

### DEVELOPMENT OF BASELINE COSTS

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## DEVELOPMENT OF BASELINE COSTS

The underlying retiree claims costs were estimated using the plan premiums effective January 1, 2014, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees (82% PPO and 18% HMO). The fully-insured retiree plans are separate from the active plans and are underwritten using the claims experience of the retired members only. The contracts for the retiree plans do not allow for any cross subsidization of premiums or rates. The prescription drug benefit for the PPO plan is self-insured. Based on conversations with EUTF's health care consultant (Segal), we did not believe it was necessary to independently verify the premiums for the PPO prescription drug benefit. The estimated age-adjusted claims shown below include administrative expenses and are net of prescription drug rebates.

Age graded and sex distinct premiums are utilized by this valuation. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

Baseline Costs for Retirees and Spouses (Medical and Prescription Drug) (Expected Monthly Per Capita Costs for Calendar Year 2014)								
	HMSA				Kaiser			
	EUTF		HSTA		EUTF		HSTA	
Age	Male	Female	Male	Female	Male	Female	Male	Female
50	\$352.24	399.11	\$349.90	\$396.46	\$388.10	\$439.74	\$368.83	\$417.91
55	460.37	473.22	457.32	470.08	507.24	521.4	482.05	495.51
60	578.36	555.93	574.52	552.24	637.24	612.53	605.60	582.11
65	287.16	264.44	334.79	308.29	315.17	290.23	356.88	328.64
70	331.24	297.85	386.17	347.25	363.54	326.9	411.66	370.17
75	367.73	326.35	428.72	380.48	403.6	358.18	457.01	405.59
80	394.28	347.55	459.68	405.19	432.74	381.44	490.01	431.93

Dental and vision benefits are not included in the benefits shown above. The underlying claims for the dental and vision benefits were not age-rated. Premiums for all medical, prescription drug, dental, and vision plans are shown in Section E.

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## **SECTION E**

### **SUMMARY OF BENEFIT PROVISIONS**

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## SUMMARY OF THE SUBSTANTIVE PLAN PROVISIONS

### **PLAN PARTICIPANTS**

A retired member of the employees' retirement system, a county pension system, or a police, firefighters and bandsmen pension system of the State or a county.

### **BASE MONTHLY CONTRIBUTION AMOUNT**

<b>January 1, 2014 - Base Monthly Contribution</b>			
	<u>Self</u>	<u>Two-Party</u>	<u>Family</u>
Non-Medicare	\$736.60	\$1,484.72	\$2,173.06
Medicare	524.72	1,051.70	1,531.78

The Base Monthly Contribution (BMC) determines the maximum amount provided by the employer to cover premiums for medical, prescription drug, dental and vision care. The BMC is adjusted annually based on the change in the Medicare Part B premium. The employer's costs for providing the Medicare Part B premium reimbursement and the life insurance benefit are in addition to the contribution related to the BMC.

### **DEFERRED RETIREMENT**

Employees who terminate employment are eligible for retiree health care benefits upon commencing a retirement or pension allowance.

### **DISABILITY RETIREMENT**

Employees who terminate due to disability are eligible for retiree health care benefits upon commencing a retirement or pension allowance from the State or county.

### **NON-DUTY DEATH IN SERVICE RETIREMENT**

If an active employee dies while in service and is eligible to retire at the time of death, the retirement system will retire the employee and the surviving spouse, domestic or civil union partner and eligible dependents are eligible for retiree medical benefits. If the member was not eligible for retirement at the time of death, the surviving spouse, domestic or civil union partner and eligible dependents are eligible for COBRA benefits only.

### **DUTY DEATH IN SERVICE RETIREMENT**

The surviving spouse, domestic or civil union partner and eligible dependents of an employee who is killed in the performance of the employee's duty are eligible for retiree health care benefits. Regardless of the employee's date of hire or years of service, the employer will pay up to the BMC for a spouse, domestic or civil union partner and eligible dependents of an employee who is killed in the performance of duty. Coverage ends when the surviving spouse or domestic or civil union partner remarries or enters into another domestic or civil union partnership or when the surviving child reaches age 19 or 24 if the child is a full-time student.



### **SURVIVING SPOUSES OF RETIRED EMPLOYEES**

The employer's contribution percentage for a surviving spouse, domestic or civil union partner and eligible dependent of a retiree who was hired prior to July 1, 2001 will remain the same as the deceased retiree. For a surviving spouse, domestic or civil union partner and eligible dependent of a retiree who was hired after June 30, 2001, the employer's contribution percentage will be half of the deceased retirees' employer contribution percentage.

### **LIFE INSURANCE**

Retiree life insurance benefit is \$2,034 as of July 1, 2013, and is provided at no cost to the retiree.

### **MEDICARE PART B REIMBURSEMENT**

Retirees and spouse/domestic and civil union partners are required to apply for Medicare Part B coverage once eligible to enroll for medical and/or prescription drug coverage. The employer reimburses the premium for both retiree and spouse/domestic or civil union partner at 100%. Surviving spouses/domestic or civil union partners, regardless of hire date, continue to receive the Part B reimbursement. The 2014 Medicare Part B premium is \$104.90 per month. EUTF will reimburse the entire Part B premium for retirees who pay higher Part B premiums due to income adjustments.

### **EMPLOYER'S CONTRIBUTION**

The Employer's percentage of the BMC for the year determines the maximum employer contribution payable. Any difference between the maximum employer contribution and the total premium for plans selected (medical, prescription drug, dental and vision) will be paid by the retiree.

Hire Date	Year of Service	% of BMC*
Before 7/1/1996	< 10	50%
	10+	100%
Post 7/1/1996	< 10	0%
	10-14	50%
	15-24	75%
	25+	100%

\*Employees hired after 6/30/2001 only receive the % of the "Self" BMC.

**EUTF Monthly Retiree Rates**  
**Effective January 1, 2014 through December 31, 2014**

Benefit Plan	Type of Enrollment	Total Contribution Required
<b><i>MEDICAL PLANS - MEDICARE</i></b>		
HMSA PPO Medicare	Self	\$200.02
	Two-Party	\$389.80
	Family	\$577.84
Medicare Prescription Drug	Self	\$145.00
	Two-Party	\$282.34
	Family	\$418.60
Kaiser HMO Medicare	Self	\$377.04
	Two-Party	\$735.24
Kaiser Prescription Drug	Family	\$1,089.64
<b><i>MEDICAL PLANS - NON-MEDICARE</i></b>		
HMSA PPO Non-Medicare	Self	\$444.38
	Two-Party	\$865.92
	Family	\$1,283.68
Non-Medicare Prescription Drug	Self	\$126.14
	Two-Party	\$245.66
	Family	\$364.24
Kaiser HMO Non-Medicare	Self	\$612.44
	Two-Party	\$1,236.16
Kaiser Prescription Drug	Family	\$1,823.16
<b><i>DENTAL PLAN</i></b>		
HDS Dental - Retiree	Self	\$31.88
	Two-Party	\$62.16
	Family	\$76.16
<b><i>VISION PLAN</i></b>		
VSP Vision - Retiree	Self	\$5.32
	Two-Party	\$10.64
	Family	\$14.28
<b><i>LIFE INSURANCE</i></b>		
Royal State National Life Insurance (Retiree only)	Self	\$4.12

**HSTA VB Monthly Retiree Rates  
Effective January 1, 2014 through December 31, 2014**

Benefit Plan	Type of Enrollment	Total Contribution Required
<b><i>MEDICAL PLANS - MEDICARE</i></b>		
HSTA VB Retiree - HMSA PPO Medicare Medical, Drug RSN Chiropractic, VSP Vision	Self	\$367.30
	Two-Party	\$716.00
	Family	\$1,058.80
HSTA VB Retiree - Kaiser HMO Medicare Medical, Drug RSN Chiropractic, VSP Vision	Self	\$391.68
	Two-Party	\$764.10
	Family	\$1,129.70
<b><i>MEDICAL PLANS - NON-MEDICARE</i></b>		
HSTA VB Retiree - HMSA PPO Non-Medicare Medical, Drug, RSN Chiropractic, VSP Vision	Self	\$603.92
	Two-Party	\$1,176.98
	Family	\$1,742.22
HSTA VB Retiree - Kaiser PPO Non-Medicare Medical, Drug, RSN Chiropractic, VSP Vision	Self	\$620.44
	Two-Party	\$1,252.26
	Family	\$1,844.42
<b><i>DENTAL PLAN</i></b>		
HDS Dental - Retiree	Self	\$31.88
	Two-Party	\$62.16
	Family	\$76.16
<b><i>VISION PLAN</i></b> <i>(Only for retirees enrolled in an out-of-state Kaiser Multi-Site or Sr. Advantage Plan - not a HSTA VEBA Plan)</i>		
VSP Vision - Retiree	Self	\$5.32
	Two-Party	\$10.64
	Family	\$14.28
<b><i>LIFE INSURANCE</i></b>		
Royal State National Life Insurance (Retiree only)		
	Self	\$4.12

## Medical Plan Coverage Chart (HMSA and Kaiser) – EUTF Non-Medicare Retirees

Plan Provisions	HMSA PPO		Kaiser HMO
General			
Deductible Single/Family	\$100 per person Maximum \$300 per family		None/None
Out-of-pocket limit Single/Family	\$2,500 per person Maximum \$7,500 per family		\$2,000 per person Maximum \$6,000 per family
Lifetime Benefit Maximum	None		None
	Your Copayment		
	In-Network	Out-of-Network	
Physician Services			
Primary Care Office Visit	10% *	30%	\$15
Specialist Office Visit	10% *	30%	\$15
Routine physical exams	Not Covered	Not Covered	No Charge
Mammography	20% *	30% *	No Charge
Second opinion – surgery	10% *	30%	\$15
Emergency Room (ER care)	10% *	10% *	\$50 in area / 20% out
Ambulance	20%	30%	20%
Inpatient Hospital Services			
Room & Board	10% *	30%	No Charge
Ancillary Services	10% *	30%	No Charge
Physician services	10% *	30%	No Charge
Surgery	10% *	30%	No Charge
Anesthesia	10% *	30%	No Charge
Outpatient Services			
Chemotherapy	20%	30%	\$15
Radiation Therapy	20% *	30%	\$15
Surgery	10% * (Cutting)	30%	\$15
Allergy Testing	20%	30%	\$15
Other Diag. Lab, X-ray & Psych Testing	20% *	30%	\$15
Anesthesia	10% *	30%	No Charge; \$15 office visit copay applies
Mental Health Services			
Inpatient care	10% *	30%	No Charge
Outpatient Care	10% *	30%	\$15
Other Services			
Durable Medical Equipment	20%	30%	20%, some exclusions
Home Health care	No Charge*	30%	No Charge
Hospice Care	No Charge*	Not Covered	No Charge
Nursing facility - skilled care	10% *, 120 days per year	30%, 120 days per year	No Charge, 100 days per benefit period
Physical & Occupational Therapy	20%	30%	\$15

\*Deductible does not apply

## Medical Plan Coverage Chart (HMSA and Kaiser) – HSTA VB Non-Medicare Retirees

SUMMARY OF YOUR PAYMENT OBLIGATIONS UNDER EACH PLAN			
Benefits will be administered as described in each plan’s documents.			
Plan Provisions	HMSA PPO		Kaiser HMO
General			
Deductible Single/Family	\$100 per person Maximum \$300 per family		None/None
Out-of-pocket limit Single/Family	\$2,000 per person Maximum \$6,000 per family		\$2,000 per person Maximum \$6,000 per family
Lifetime Benefit Maximum	\$2,000,000		None
	Your Copayment		
	In-Network	Out-of-Network	
Physician Services			
Primary Care Office Visit	10% *	30%	\$15
Specialist Office Visit	10% *	30%	\$15
Routine physical exams	No Charge*; limited to combined CY dollar max depending on age scale	No Charge*; limited to combined CY dollar max depending on age scale	No Charge
Mammography	10% *	30%	No Charge
Second opinion – surgery	10% *	30%	\$15
Emergency Room (ER care)	10% *	10% *	\$50 in area /20% out
Ambulance	10% *	30%	20%
Inpatient Hospital Services			
Room & Board	10% *	30%	No Charge
Ancillary Services	10% *	30%	No Charge
Physician services	10% *	30%	No Charge
Surgery	10% *	30%	No Charge
Anesthesia	10% *	30%	No Charge
Outpatient Services			
Chemotherapy	10% *	30%	\$15
Radiation Therapy	10% *	30%	\$15
Surgery	10% *	30%	\$15
Allergy Testing	10% *	30%	\$15
Other Diag. Lab, X-ray & Psych Testing	10% *	30%	\$15
Anesthesia	10% *	30%	No Charge; \$15 office visit copay applies
Mental Health Services			
Inpatient care	10% *	30%	No Charge
Outpatient Care	10% *	30%	\$15
Other Services			
Durable Medical Equipment	10% *	30%	20%
Home Health care	No Charge*	30%	No Charge
Hospice Care	No Charge*	Not Covered	No Charge
Nursing facility - skilled care	10%*; 120 days per year	30%; 120 days per year	No Charge, 100 days benefit period
Physical & Occupational Therapy	10% *	30%	\$15

\*Deductible does not apply.

## PPO and HMO Prescription Drug Plans – EUTF Non-Medicare Retirees

COVERAGE	PPO Prescription Drug Plan (administered by CVS Caremark)		HMO Prescription Drug Plan (Kaiser)
RETAIL PRESCRIPTION PROGRAM (30 day supply)	Participating Pharmacy	Non-participating Pharmacy	Copayment up to
Generic	\$5 copayment	\$5 + 20% of eligible charges	\$15
Preferred Brand Name	\$15 copayment	\$15 + 20% of eligible charges	\$15
Other Brand Name	\$30 copayment	\$30 + 20% of eligible charges	\$15
Injectables and Specialty Drug	20% Up to \$250 copay maximum; \$2,000 out-of-pocket maximum per plan year	Not a benefit	\$15
Insulin			
Preferred Insulin	\$5 copayment	\$5 + 20% of eligible charges	\$15
Other Insulin	\$15 copayment	\$15 + 20% of eligible charges	\$15
Diabetic Supplies			
Preferred Diabetic Supplies	No copayment	No copayment	\$15
Other Diabetic Supplies	\$15 copayment	\$15 + 20% of eligible charges	\$15
MAINTENANCE MEDICATION – RETAIL & MAIL (90 day supply)	Mail order or CVS Caremark or Any Network Retail Pharmacy		
Generic	\$10 copayment		\$30
Preferred Brand Name	\$30 copayment		\$30
Other Brand Name	\$60 copayment		\$30
Specialty Drug	Not available via Mail Order and only available in up to 30 day supply. Annual out of pocket maximum of \$2,000 for specialty drugs		\$30
Insulin			
Preferred Insulin	\$10 copayment		Not available through Mail Order
Other Insulin	\$30 copayment		Not available through Mail Order
Diabetic Supplies			
Preferred Diabetic Supplies	No copayment		\$30
Other Diabetic Supplies	\$30 copayment		\$30

## PPO and HMO Prescription Drug Plans – HSTA VB Non-Medicare Retirees

COVERAGE	PPO Prescription Drug Plan (administered by CVS Caremark)		HMO Prescription Drug Plan (Kaiser)
RETAIL PRESCRIPTION PROGRAM (30 day supply)	Participating Pharmacy	Non-participating Pharmacy	Copayment up to
Generic and Insulin	\$5 copayment	\$5 + 30% of eligible charges	\$10
All covered Brand Name	\$15 copayment	\$15 + 30% of eligible charges	\$10
Specialty Drug	Specialty medications are subject to the applicable Brand/Generic copayment		\$10
MAINTENANCE MEDICATION – RETAIL & MAIL (90 day supply)	Mail order or CVS Caremark or Any Network Retail Pharmacy		
Generic and Insulin	\$9 copayment		\$20; Insulin not available through Mail Order
All covered Brand Name	\$27 copayment		\$20
Specialty Drug	Not available via Mail Order and only available in up to 30 day supply		\$20 for Mail Order; \$30 for Retail
Lancets, Strips and Meters	No copayment		50% coinsurance

## Medical Plan Coverage Chart (HMSA and Kaiser) – EUTF Medicare Retirees

Plan Provisions	HMSA PPO		Kaiser HMO**
General			
Deductible Single/Family	\$100 per person Maximum \$300 per family		None/None
Out-of-pocket limit Single/Family	\$2,500 per person Maximum \$7,500 per family		\$2,000 per person Maximum \$6,000 per family
Lifetime Benefit Maximum	None		None
	Your Copayment		
	In-Network	Out-of-Network	
Physician Services			
Primary Care Office Visit	10% *	30%	\$15
Specialist Office Visit	10% *	30%	\$15
Routine physical exams	Not Covered	Not Covered	No Charge
Mammography	20% *	30% *	No Charge
Second opinion – surgery	10% *	30%	\$15
Emergency Room (ER care)	10% *	10% *	\$50
Ambulance	20%	30%	20%
Inpatient Hospital Services			
Room & Board	10% *	30%	No Charge
Ancillary Services	10% *	30%	No Charge
Physician services	10% *	30%	No Charge
Surgery	10% *	30%	No Charge
Anesthesia	10% *	30%	No Charge
Outpatient Services			
Chemotherapy	20%	30%	\$15
Radiation Therapy	20% *	30%	\$15
Surgery	10% * (Cutting)	30%	\$15
Allergy Testing	20%	30%	\$15
Other Diag. Lab, X-ray & Psych Testing	20% *	30%	No Charge
Anesthesia	10% *	30%	\$15
Mental Health Services			
Inpatient care	10% *	30%	No Charge
Outpatient Care	10% *	30%	\$15
Other Services			
Durable Medical Equipment	20%	30%	20%, some exclusions
Home Health care	No Charge*	30%	No Charge
Hospice Care	No Charge*	Not Covered	No Charge, Home Care
Nursing facility - skilled care	10% *, 120 days per year	30%, 120 days per year	No Charge, 100 days per benefit period
Physical & Occupational Therapy	20%	30%	\$15

\*Deductible does not apply.

\*\*Contact Kaiser Permanente for questions about Senior Advantage benefits.



## Medical Plan Coverage Chart (HMSA and Kaiser) – HSTA VB Medicare Retirees

SUMMARY OF YOUR PAYMENT OBLIGATIONS UNDER EACH PLAN			
Benefits will be administered as described in each plan’s documents.			
Plan Provisions	HMSA PPO		Kaiser HMO**
General			
Deductible Single/Family	\$100 per person Maximum \$300 per family		None/None
Out-of-pocket limit Single/Family	\$2,000 per person Maximum \$6,000 per family		\$2,000 per person Maximum \$6,000 per family
Lifetime Benefit Maximum	\$2,000,000		None
	Your Copayment		
	In-Network	Out-of-Network	
Physician Services			
Primary Care Office Visit	10%*	30%	\$15
Specialist Office Visit	10%*	30%	\$15
Routine physical exams	No Charge*; limited to combined CY dollar max depending on age scale	No Charge*; limited to combined CY dollar max depending on age scale	No Charge
Mammography	10%*	30%	No Charge
Second opinion – surgery	10%*	30%	\$15
Emergency Room (ER care)	10%*	10%*	\$50
Ambulance	10%*	30%	20%
Inpatient Hospital Services			
Room & Board	10%*	30%	No Charge
Ancillary Services	10%*	30%	No Charge
Physician services	10%*	30%	No Charge
Surgery	10%*	30%	No Charge
Anesthesia	10%*	30%	No Charge
Outpatient Services			
Chemotherapy	10%*	30%	\$15
Radiation Therapy	10%*	30%	\$15
Surgery	10%*	30%	\$15
Allergy Testing	10%*	30%	\$15
Other Diag. Lab, X-ray & Psych Testing	10%*	30%	No Charge
Anesthesia	10%*	30%	No Charge; \$15 office visit copay applies
Mental Health Services			
Inpatient care	10%*	30%	No Charge
Outpatient Care	10%*	30%	\$15
Other Services			
Durable Medical Equipment	10%*	30%	20%
Home Health care	No Charge*	30%	No Charge
Hospice Care	No Charge*	Not Covered	No Charge, Home Care
Nursing facility - skilled care	10%*; 120 days per year	30%; 120 days per year	No Charge, 100 days benefit period
Physical & Occupational Therapy	10%*	30%	\$15

\*Deductible does not apply.

\*\*Contact Kaiser Permanente for questions about Senior Advantage benefits.

## Medicare Part D Prescription Drug Plans – EUTF

COVERAGE	PPO Prescription Drug Plan (Administered by SilverScript)	HMO Prescription Drug Plan (Kaiser)
<b>RETAIL PRESCRIPTION PROGRAM (30/60/90 day supply)</b>	<b>Medicare Participating Pharmacy</b>	<b>Copayment up to</b>
<b>Generic</b>	\$5/\$10/\$10 copayment	\$15/\$30/\$45 copayment
<b>Preferred Brand Name</b>	\$15/\$30/\$30 copayment	\$15/\$30/\$45 copayment
<b>Non-Preferred Brand Name</b>	\$30/\$60/\$60 copayment	\$15/\$30/\$45 copayment
<b>Specialty Drug</b>	20% coinsurance Up to a \$250 copay max	\$15/\$30/\$45 copayment
<b>Insulin</b>		
Covered Insulin Products	\$5/\$10/\$10 copayment	\$15/\$30/\$45 copayment
<b>Diabetic Supplies</b>		
Lancets, Strips and Meters	No copayment	\$15/\$30/\$45 copayment
<b>MAIL ORDER PRESCRIPTION PROGRAM (30/60/90 day supply)</b>	<b>Mail Order or CVS Caremark</b>	
<b>Generic</b>	\$5/\$10/\$10 copayment	\$15/\$30/\$30 copayment
<b>Preferred Brand Name</b>	\$15/\$30/\$30 copayment	\$15/\$30/\$30 copayment
<b>Non-Preferred Brand Name</b>	\$30/\$60/\$60 copayment	\$15/\$30/\$30 copayment
<b>Specialty Drug</b>	Not Available	\$15/\$30/\$30 copayment
<b>Insulin</b>		
Covered Insulin Products	\$5/\$10/\$10 copayment	Not available through Mail Order
<b>Diabetic Supplies</b>		
Lancets, Strips and Meters	Not available through CVS/Caremark Mail Order	\$15/\$30/\$30 copayment

## Medicare Part D Prescription Drug Plans – HSTA VB

COVERAGE	PPO Prescription Drug Plan (Administered by SilverScript)	HMO Prescription Drug Plan (Kaiser)
<b>RETAIL PRESCRIPTION PROGRAM (30/60/90 day supply)</b>	<b>Participating Pharmacy</b>	<b>Copayment up to</b>
<b>Generic and Covered Insulin Products</b>	\$3/\$9/\$9 copayment	\$10/\$20/\$30 copayment
<b>All Covered Brand Name</b>	\$9/\$27/\$27 copayment	\$10/\$20/\$30 copayment
<b>Specialty</b>	Specialty medications are subject to the applicable Brand/Generic copayment	\$10/\$20/\$30 copayment
<b>Diabetic Supplies</b>		
Lancets, Strips and Meters	No copayment	20%
<b>MAIL ORDER PRESCRIPTION PROGRAM (30/60/90 day supply)</b>	<b>Mail Order or CVS Caremark</b>	
<b>Generic and Covered Insulin Products</b>	\$3/\$9/\$9 copayment	\$20/\$40/\$40 copayment; Insulin not available through Mail Order
<b>All Covered Brand Name</b>	\$9/\$27/\$27 copayment	\$20/\$40/\$40 copayment
<b>Specialty</b>	Not available	\$20/\$40/\$40 copayment
<b>Diabetic Supplies</b>		
Lancets, Strips and Meters	Not available through CVS/Caremark Mail Order	20%

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## **SECTION F**

### SUMMARY OF PARTICIPANT DATA

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### Active Employee Age/Service Distribution

Attained Age	Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	407	138	43	10	12	3	-	-	-	-	-	-	613
25-29	1,113	763	543	365	378	565	1	-	-	-	-	-	3,728
30-34	1,032	612	455	373	555	2,773	375	1	-	-	-	-	6,176
35-39	766	450	333	253	408	2,575	2,167	236	6	-	-	-	7,194
40-44	628	371	275	193	359	2,115	2,259	1,944	524	3	-	-	8,671
45-49	441	275	235	142	323	1,819	1,617	1,487	2,442	455	3	-	9,239
50-54	441	258	178	150	314	1,650	1,479	1,238	2,183	1,797	362	3	10,053
55-59	395	222	173	126	261	1,393	1,357	1,125	1,892	1,548	1,029	231	9,752
60-64	278	143	101	96	167	1,075	1,038	823	1,273	913	603	669	7,179
65 & Over	179	37	41	45	70	553	546	377	545	350	209	551	3,503
Total	5,680	3,269	2,377	1,753	2,847	14,521	10,839	7,231	8,865	5,066	2,206	1,454	66,108

### Inactive Age Distribution

Age	Deferred Inactives	Retirees	Total
<35	263	26	289
35-39	380	9	389
40-44	732	39	771
45-49	1,088	122	1,210
50-54	1,318	512	1,830
55-59	1,388	2,095	3,483
60-64	1,073	5,876	6,949
65-69	269	9,612	9,881
70-74	75	7,471	7,546
75-79	32	6,084	6,116
80-84	8	5,420	5,428
85-89	4	3,805	3,809
90-94	2	1,757	1,759
95+	0	517	517
Total	6,632	43,345	49,977

**Hawaii Employee-Union Trust Fund**  
**Distribution by Health Plan and Coverage Type**

**Actives**

	<u>Single</u>	<u>Two-Party</u>	<u>Family</u>	<u>Waived</u>	<u>Total</u>
PPO	19,365	6,238	11,016	N/A	36,619
HMO	7,922	2,256	3,359	N/A	13,537
Others	70	69	147	N/A	286
Waived				15,666	15,666
<b><i>Total Medical</i></b>					<b>66,108</b>
Dental	25,978	11,747	17,200	11,183	<b>66,108</b>
Vision	25,879	10,330	15,475	14,424	<b>66,108</b>

**Retirees**

	<u>Single</u>	<u>Two-Party</u>	<u>Family</u>	<u>Total</u>
PPO	19,833	13,099	1,496	34,428
HMO	4,453	2,501	311	7,265
Others	87	50	2	139
<b><i>Total Medical</i></b>				<b>41,832</b>
Dental	24,439	15,507	1,704	<b>41,650</b>
Vision	24,391	15,861	1,833	<b>42,085</b>
Life				<b>38,249</b>

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## **SECTION G**

### **ACTUARIAL ASSUMPTIONS AND METHODS**

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## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial assumptions used in the valuation are shown in this Section. Assumptions that are specific to certain groups (i.e. General Employees, Teachers, Police and Firefighters) are discussed under the first subsection that follows. Assumptions that are common to all types of members and unique to this valuation are then shown on the following pages.

### **Demographic and Certain Economic Assumptions**

This Actuarial Valuation of the OPEB is similar to the Actuarial Valuations performed for ERS. All of the demographic assumptions and most of the economic assumptions used in this OPEB Valuation were identical to those used in the June 30, 2013 retirement system valuations performed by Gabriel, Roeder, Smith and Company, dated December 31, 2013. For the Honolulu Authority of Rapid Transportation (HART) valuation, the withdrawal rates were adjusted to reflect anticipated reductions in workforce. The assumptions which are common to the pension and OPEB valuations are described in Appendix A of this report.



**Healthcare and Other Economic Assumptions**

*General Inflation* was assumed to be 3.00% per year.

*The rate of investment return* was assumed to be 7.00% a year, compounded annually net after investment expenses. The assumed real return is the rate of return in excess of price inflation. Considering other assumptions used in the valuation, the nominal rate translates to a net real return of 4.00% a year.

*Health Cost and Premium Increases – See table below*

<i>Year</i>	<i>HMSA (PPO)</i>	<i>Kaiser (HMO)</i>	<i>Dental</i>	<i>Vision</i>	<i>Part B Premiums</i>
<b>2014</b>	9.00%	7.50%	4.00%	3.00%	5.00%
<b>2015</b>	9.00%	7.25%	4.00%	3.00%	5.00%
<b>2016</b>	9.00%	7.00%	4.00%	3.00%	5.00%
<b>2017</b>	9.00%	6.75%	4.00%	3.00%	5.00%
<b>2018</b>	9.00%	6.50%	4.00%	3.00%	5.00%
<b>2019</b>	9.00%	6.25%	4.00%	3.00%	5.00%
<b>2020</b>	9.00%	6.00%	4.00%	3.00%	5.00%
<b>2021</b>	9.00%	5.75%	4.00%	3.00%	5.00%
<b>2022</b>	5.50%	5.50%	4.00%	3.00%	5.00%
<b>2023</b>	5.25%	5.25%	4.00%	3.00%	5.00%
<b>2024 &amp; Beyond</b>	5.00%	5.00%	4.00%	3.00%	5.00%

*The premiums for 2013 and 2014 were known at the time of the valuation. Therefore, the first trend rate shown above (2014) is assumed to occur at 1/1/2015. Future increases are also assumed to occur on 1/1. The HMSA and Kaiser trend rates are blended rates used to project both medical and prescription drug costs.*

The assumed trend rates for the PPO plan reflect a gradual wear-away of the savings associated with the EWGP Wrap Plan design.

**Healthcare and Other Economic Assumptions (Continued)**

***Plan Participation***

The plan participation rates were assumed to vary based on the employer contribution percentage, as follows:

Employer Contribution	Rates of Participation		
	Medical, Prescription Drug, Dental and Vision	Life Insurance	Medicare Part B
0%	25%	100%	98%
50%	65%	100%	98%
75%	90%	100%	98%
100%	98%	100%	98%

The same assumptions were used for terminated participants with vested pension benefits. However, current active employees who terminate service prior to the age of 35 are not assumed to ever participate in the retiree health plan.

For current retirees, the actual family coverage election is used. For future retirees, the family coverage assumptions are 50% single / 45% two-party / 5% family prior to age 65 and 50% single / 50% two-party after the age of 65. For those that elect two-party or family coverage, it was assumed that coverage would continue to the spouse upon death of the retiree.

***Plan Elections***

For current retirees, plan elections were based on the plan in which they are currently enrolled. For future retirees, plan participation was assumed to be 82% HMSA / 18% Kaiser.

### Healthcare and Other Economic Assumptions (Continued)

**Aging Factors:** In any given year, the cost of medical and prescription drug benefits vary by age. As the ages of retirees in the covered population increase so does the cost of benefits. Morbidity tables are employed to develop Per Capita Costs at every relevant age. The following table represents the percent by which the cost of medical and prescription drug benefits at one age is higher than the cost for the previous age. For example, according to the following table, the cost of benefits for a male age 55 is 5.13% higher than for one age 54. These percentages below are separate from the annual Medical Trend, which operates to increase costs independent of and in addition to the Aging Factors shown below.

Sample Ages	Cost Increases by Age	
	Male	Female
45	6.43%	2.89%
50	6.01%	3.36%
55	5.13%	3.48%
60	4.35%	3.10%
65	3.40%	2.73%
70	2.57%	2.19%
75	1.82%	1.61%
80	1.14%	1.04%
85	0.57%	0.49%
90	0.00%	0.00%

### Actuarial Methods

*The individual entry age actuarial cost method* was used in determining liabilities and normal cost. Differences between assumed experience and actual experience (“actuarial gains and/or losses”) become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce payments (principal & interest) which are a level percent of payroll. Closed bases will be established at each valuation for new unfunded liabilities. If experience produces a gain during a valuation cycle, the new base will be netted against prior loss bases by setting the amortization period to equal that of the loss base. This process substantially reduces volatility as bases are fully amortized.

**Miscellaneous and Technical Assumptions**

Actuarial Value of Assets:	Market Value
Marriage Assumption:	100% of males and females are assumed to be married for purposes of death-in-service benefits. For future retirees, husbands are assumed to be four years older than wives.
Pay Increase Timing:	Beginning of (fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	Except for teachers, decrements of all types are assumed to occur mid-year. For teachers, the normal retirement, early retirement and termination decrements are assumed to occur at the beginning of the year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Decrement Operation:	Disability and mortality decrements are added to the termination decrements during the first 5 years. Disability is added to the retirement decrement during retirement eligibility.
Deferred Age:	Terminated employees with vested pension benefits are assumed to commence their benefit at age 62 or their current age if they are older than 62 as of the valuation date.
Incidence of ARC Contributions:	The ARC is assumed to be received at the middle of the year.
Administrative Expenses:	Administrative expenses are included in the age-rated costs the premiums.
Reliance on Other Actuaries	We have relied on the premiums develop by Segal Consulting for the self-insured PPO prescription drug benefit.

**Miscellaneous and Technical Assumptions (continued)**

Excise Tax and  
Health Care Reform

This report has not incorporated any additional liabilities associated with the excise tax on high-cost employer health plans effective January 1, 2018. The “Cadillac” tax is a 40% excise tax paid by the coverage provider (employer and/or insurer) on the value of health plan costs in excess of legislated thresholds.

The excise tax is not expected to have a material impact on the post-65 benefits, which represent the majority of the liability. In addition, the impact of the excise tax on the pre-65 employer costs is expected to be minimal due to the employer cap.

Assumption/Method  
Changes

1. The discount rate used to determine the State of Hawaii’s liabilities was changed from 4.0% to 7.0%. The discount rate was unchanged for the other participating employers.
2. Based on a review of the plan’s experience, the participation assumption for future retirees who are eligible for a 50% subsidy was increased from 50% to 65%.
3. The participation assumption for future retirees who are eligible for 100% employer contribution was decreased from 99% to 98%.
4. The participation assumption for the Medicare Part B reimbursement was decreased from 99% to 98%.
5. The percentage of covered retirees who also cover a spouse was increased from 48% to 50%. This change was made to better reflect spouse elections for retirees hired before July 1, 2001.
6. The trend rates were reset to better reflect the plan’s anticipated experience.
7. Pursuant to changes made to the retirement plan, new retirement eligibilities have been added for employees hired after 6/30/2012.

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## **APPENDIX A**

### DEMOGRAPHIC AND CERTAIN ECONOMIC ASSUMPTIONS

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## DEMOGRAPHIC AND CERTAIN ECONOMIC ASSUMPTIONS

### A. Economic Assumptions

1. Payroll growth rate: 3.50% per annum.
2. Salary increase rate: As shown below

Years of Service	General Employees		Teachers	
	Service-related Component	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate	Service-related Component	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.50% General Increase Rate
(1)	(2)	(3)	(2)	(3)
1	4.00%	8.00%	4.00%	8.50%
2	3.00%	7.00%	3.25%	7.75%
3	2.00%	6.00%	2.50%	7.00%
4	1.25%	5.25%	2.00%	6.50%
5	1.00%	5.00%	1.50%	6.00%
6	0.75%	4.75%	1.00%	5.50%
7	0.50%	4.50%	1.00%	5.50%
8	0.50%	4.50%	0.75%	5.25%
9	0.50%	4.50%	0.75%	5.25%
10	0.25%	4.25%	0.75%	5.25%
11	0.25%	4.25%	0.50%	5.00%
12	0.25%	4.25%	0.50%	5.00%
13	0.25%	4.25%	0.50%	5.00%
14	0.25%	4.25%	0.50%	5.00%
15 or more	0.00%	4.00%	0.00%	4.50%

	Police & Firefighters	
Years of Service	Service-related Component	Total Annual Rate of Increase Including 3.00% Inflation Component and 2.00% General Increase Rate
(1)	(2)	(3)
0	14.00%	19.00%
1	12.00%	17.00%
2 or more	0.00%	5.00%

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period between the valuation date and the first anniversary of the valuation date is equal to the reported pay for the prior year, annualized if necessary, and then increased by the salary increase assumption.

B. Demographic Assumptions

1. Post-Retirement Mortality rates

General Employees

- a. Healthy males – Client Specific Table for males, 89% multiplier.
- b. Healthy females - Client Specific Table for females, 89% multiplier.
- c. Disabled males - 1994 US Group Annuity Mortality Static Table for males set forward nine years.
- d. Disabled females - 1994 US Group Annuity Mortality Static Table for females set forward nine years.

Teachers

- a. Healthy males – Client Specific Table for male teachers, 65% multiplier.
- b. Healthy females - Client Specific Table for female teachers, 67% multiplier.
- c. Disabled males - 1994 US Group Annuity Mortality Static Table for males set forward five years.
- d. Disabled females - 1994 US Group Annuity Mortality Static Table for females set forward six years.



Police and Fire

- a. Healthy males – 1994 US Group Annuity Mortality Static Table for males, 85% multiplier.
- b. Healthy females - 1994 US Group Annuity Mortality Static Table for females, 85% multiplier.
- c. Disabled males - 1994 US Group Annuity Mortality Static Table for males set forward three years.
- d. Disabled females - 1994 US Group Annuity Mortality Static Table for females set forward three years.

Mortality Improvement: To account for future mortality improvement, the healthy mortality rates were chosen so that the assumed mortality rates are smaller than the rates observed in the most recent experience study (dated 12-20-2010). The margin at the time of the study was at least 7% for all groups (i.e. 7% more actual male deaths than expected). No future mortality improvement after the measurement date is assumed except as described above.

2. Pre-retirement Mortality Rates

The male pre-retirement mortality rates are multiples of a table that has the RP-2000 Male Employee rates for ages 1 to 70 and the RP-2000 Combined Male rates for ages above 70. Similarly, the female pre-retirement rates are multiples of a table that has the RP-2000 Female Employee rates for ages 1 to 70 and the RP-2000 Combined Female rates for ages above 70. The following table shows the factors that are used in conjunction with the tables described above to derive the final ordinary and accidental death rates.

	<u>General Employees</u>		<u>Teachers</u>		<u>Police and Fire</u>	
Type	Males	Females	Males	Females	Males	Females
Ordinary	64%	48%	50%	40%	15%	15%
Accidental	16%	12%	10%	5%	35%	35%

3. Disability rates – The assumed total disability rates for employees covered by the contributory plan, hybrid plan and the noncontributory plan at select ages are multiples of the client specific table that follows:

Age	Male & Female
25	0.000%
30	0.001%
35	0.008%
40	0.026%
45	0.064%
50	0.146%
55	0.198%
60	0.217%

Note: The disability rates project the percentage of employees at each age that is assumed to become disabled before retiring. Multiples of the rates above are assumed to be ordinary disability or accidental disability, and vary by employee group as follows:

	General Employees		Teachers		Police and Fire
Type	Male	Female	Male	Female	Male & Female
Ordinary	135%	85%	50%	40%	70%
Duty	30%	7%	5%	5%	35%

4. Termination Rates - Separate male and female rates, based on both age and service, developed from 2010 Experience Study. Rates reflect terminations for causes other than death, disability or retirement. Employees eligible for retirement are assumed to have no probability of termination. Sample rates are shown below:

For first 6 years of service

Group	Expected Terminations per 100 Lives (Male Members)					
	Years of Service					
	0	1	2	3	4	5
General Employees	15.5	12.5	10.5	9.0	7.0	6.0
Teachers	33.0	23.0	15.0	13.0	11.0	9.0
Police & Fire	12.0	9.0	4.0	4.0	4.0	4.0

Group	Expected Terminations per 100 Lives (Female Members)					
	Years of Service					
	0	1	2	3	4	5
General Employees	18.5	16.5	12.5	10.0	8.0	7.0
Teachers	28.0	23.0	16.0	14.0	12.0	8.0
Police & Fire	12.0	9.0	4.0	4.0	4.0	4.0

After first 6 years of service

Age	Expected Terminations per 100 Lives				
	Years of Service				
	General Employees Males	General Employees Females	Teachers Males	Teachers Females	Police & Fire
(1)	(2)	(3)	(4)	(5)	(6)
20	7.15	8.12	6.22	7.12	2.03
25	6.50	7.83	4.98	6.72	1.91
30	5.46	5.84	4.12	6.15	2.53
35	4.40	4.04	3.95	4.99	2.75
40	3.60	3.30	3.60	3.70	2.01
45	3.02	2.65	2.88	2.88	1.18
50	2.54	2.41	2.34	2.36	0.79
55	2.52	2.41	2.34	2.36	0.24
60	2.52	2.41	2.34	2.36	0.00

5. Retirement rates - Separate male and female rates, based on age, developed from the 2010 Experience Study. Sample rates are shown below:

Contributory Plan and Hybrid Plan

Age	Expected Retirements per 100 Lives				
	General Employees		Teachers		Police and Fire
	Male	Female	Male	Female	Male & Female
45	2	1	0	0	13
46	2	1	0	0	13
47	2	1	0	0	13
48	2	1	0	0	13
49	2	1	0	0	13
50	2	1	1	0	15
51	2	1	1	1	15
52	2	1	1	1	15
53	2	2	2	2	15
54	3	3	3	3	15
55	16	13	20	18	20
56	14	13	15	16	20
57	14	13	15	16	20
58	14	13	15	16	20
59	14	13	15	16	20
60	14	15	14	18	30
61	15	15	14	18	30
62	25	25	14	25	30
63	20	20	14	20	30
64	20	20	14	15	30
65	25	25	20	25	100
66	25	25	15	25	100
67	20	20	15	20	100
68	20	20	15	20	100
69	20	20	15	20	100
70	20	20	15	20	100
71	20	20	15	20	100
72	20	20	15	20	100
73	20	20	15	20	100
74	20	20	15	20	100
75	100	100	100	100	100

Retirement rates for 25 & out group ages 50-54 are 10% for both males and females

Noncontributory Plan

Expected Retirements per 100 Lives								
Age	General Employees				Teachers			
	Unreduced Retirement		Reduced Retirement		Unreduced Retirement		Reduced Retirement	
	Male	Female	Male	Female			Male	Female
55	13	12	2	2	10	13	2	3
56	13	12	2	2	10	13	2	3
57	13	12	2	2	10	14	2	3
58	13	12	2	2	10	15	2	3
59	13	12	3	3	10	16	3	3
60	14	15	4	4	10	17	5	5
61	14	18	5	5	10	18	10	5
62	25	25			16	25		
63	25	25			12	20		
64	20	20			10	18		
65	25	22			20	30		
66	25	22			15	25		
67	25	22			15	25		
68	25	22			15	25		
69	25	22			15	25		
70	20	20			15	25		
71	20	20			15	25		
72	20	20			15	25		
73	20	20			15	25		
74	20	20			15	25		
75	100	100			100	100		

Retirement rates for the 25 & out group ages 50-54 are 10% for both males and females

For Hybrid plan, early retirement rates are reduced by a factor of 10% for each year prior to age 65 (if hired after June 30, 2012) or 62 (if hired before July 1, 2012) for a maximum of 10 years.

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## **APPENDIX B**

### GLOSSARY

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## Glossary

**Accrued Service.** The service credited under the plan which was rendered before the date of the actuarial valuation.

**Actuarial Accrued Liability.** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

**Actuarial Assumptions.** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Actuarial Cost Method.** A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

**Actuarial Equivalent.** A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

**Actuarial Present Value.** The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

**Amortization.** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

**Annual Required Contribution (ARC).** The ARC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ARC is an amount that is actuarially determined in accordance with the requirements so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded liability.

**Governmental Accounting Standards Board (GASB).** GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.



**Medical Trend Rate (Health Inflation).** The increase in the plan's cost over time. Trend includes all elements that may influence a plan's cost, assuming that enrollments and the plan benefits do not change. Trend includes such elements as, pure price inflation, changes in utilization, advances in medical technology, and cost shifting.

**Normal Cost.** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

**Other Post-Employment Employee Benefits (OPEB).** OPEB are post-employment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs or other healthcare benefits.

**Reserve Account.** An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

**Unfunded Actuarial Accrued Liability.** The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

**Valuation Assets.** The value of current plan assets recognized for valuation purposes.